REMARKS

Applicants would like to thank Examiner Flournoy for the indication of allowable subject matter recited in claims 7-8, 24-25, 43-44, 62-63, 81-82 and 100-101.

Currently, claims 1-8, 18-26, 37-45, 56-64, 75-83 and 94-101 are pending in the action, with claims 1, 18, 37, 56, 75 and 94 being independent. Claims 94-101 have been amended. Claim 111 is added. Support for the new claim can be found, for example, in Fig. 2 and its corresponding section(s) of the specification. No new matter has been added.

Claims 94-101 are rejected under 35 U.S.C. §101 as directed to non-statutory subject matter.

Claims 1-6, 18-23, 37-42, 45, 56-61, 64, 75-80, 83 and 94-99 are rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. RE38,821 to Shemla.

Applicants respectfully traverse these rejections. Reconsideration and allowance of the above-referenced application are respectfully requested in light of the following comments and remarks.

Section 101 Rejections

Claims 94-101 are rejected as allegedly being directed to non-statutory subject matter because these claims recite a "computer program". While Applicants believe that the claims as presented are directed to statutory subject matter, Applicants have amended these claims to recite a "computer-readable medium" having instructions stored thereon, which, when executed by a processor, causes the processor to perform operations recited in these claims. In view of these amendments, Applicants respectfully request that the rejections to claims 94-101 under 35. U.S.C. §101 be withdrawn.

Section 102(e) Rejections

Claims 1-6, 18-23, 37-42, 45, 56-61, 64, 75-80, 83 and 94-99 are rejected as allegedly being unpatentable over Shemla. Claim 1 recites in part writing **one of a plurality of sets** in an

allocation memory into an allocation register, wherein the allocation memory includes a plurality of data elements arranged in the plurality of sets.

Shemla shows a network switch 12 that includes a DRAM 20 and a switching Ethernet controller 10 (3:16-31). The Ethernet controller 10 includes a switching unit 34 that determines where to send each packet (3:57-59). The switching unit 34 includes a hash table address control unit 52 which operates in conjunction with a hash table (physically found in the DRAM 20) that identifies the possible addresses of the entire network (4:51-54).

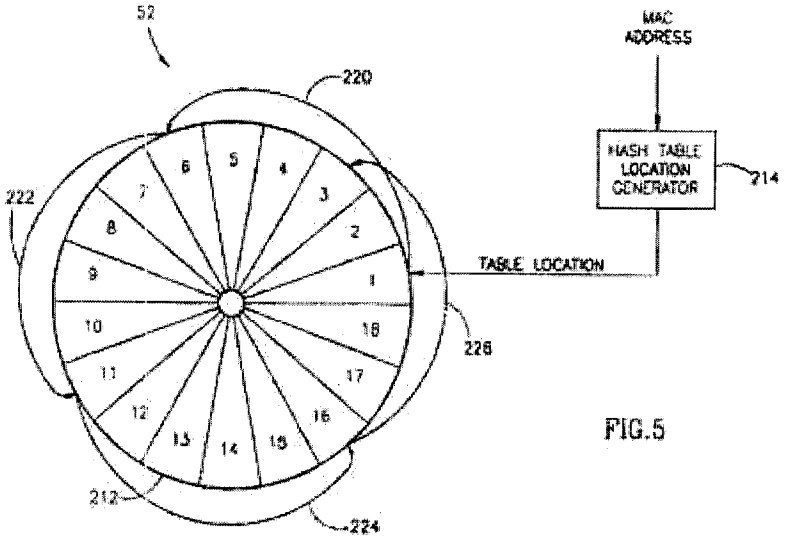

FIG.5

As shown in the figure above, the hash table control unit 52 includes a hash table 212 which stores MAC addresses, and a hash table location generator 214 which receives a MAC address and transforms the MAC address, via a hash function, to a table location (8:31-41).

Claim 1 recites "writing one of a plurality of sets in an allocation memory to an allocation register". The Examiner has identified Shemla's hash table 212 as the claimed allocation memory and hash table locations. *See*, page 4, lines 10-12 of Office Action. Applicants respectfully submit that Shemla's hash table 212 does not include "a plurality of sets". As shown in FIG. 5, the hash table 212 identifies eighteen hash locations each of which is used to store MAC addresses and port information associated therewith (8:34-37). Each hash location, however, is not an individual set or one that makes a plurality of sets collectively. Rather,

Shemla only has a single set to be written entirely into the twelve buffers 122 each being associated with a single-bit buffer 124 for indicating an empty or full state of the corresponding buffer 122 (2:22-30; 6:37-42).

Further, claim 1 recites in part identifying a data element in the allocation register, and changing the value of the data element. The Examiner construes Shemla's request transfer register 64 as the claimed allocation register. *See*, page 4, line 15 of Office Action.

Referring to Shemla, when a packet of data is to be transferred, the transfer manager 62 prepares a "buffer request" message and writes the message into the buffer request register 64 of the destination Ethernet controller 10 (5:36-38). The "buffer request" includes the address of the buffer storing the packet to be transferred and the port number of the destination Ethernet controller 10 (5:39-42). Applicants respectfully submit that Shemla does not identify a data element in the buffer request message. Rather, Shemla's single-bit data element whose value can be changed based on the empty or full state of an associated buffer resides in the empty list block 50 of the switching unit 34 (2:21-31; 6:37-45), not in the request transfer register 64.

For at least the foregoing reasons, Applicants respectfully submit that Shemla does not anticipate claim 1. Claims 2-8 depend on claim 1, and also are submitted to be allowable for at least the same reasons set forth above with respect to claim 1.

Claim 18

Claim 18 recites in part a buffer manager to write one of a plurality of sets into an allocation register, identify a data element in the allocation register, and change the value of the data element.

As discussed above, Shemla does not teach at least or suggest these features. For at least the reasons similar to those discussed with respect to claim 1, Applicants respectfully submit that Shemla also does not anticipate claim 18. Claims 19-26 depend on claim 18, and also are submitted to be allowable for at least the same reasons set forth above with respect to claim 18.

Claim 37

Claim 37 recites in part a buffer manager to write one of a plurality of sets into an allocation register, identify a data element in the allocation register, and change the value of the data element.

As discussed above, Shemla does not teach at least or suggest these features. For at least the reasons similar to those discussed with respect to claim 37, Applicants respectfully submit that Shemla also does not anticipate claim 37. Claims 57-64 depend on claim 56, and also are submitted to be allowable for at least the same reasons set forth above with respect to claim 56.

Claim 75

Claim 75 recites in part a buffer manager including means for writing one of a plurality of sets into an allocation register, identifying a data element in the allocation register, and changing the value of the data element.

As discussed above, Shemla does not at least teach or suggest these features. For at least the reasons similar to those discussed with respect to claim 75, Applicants respectfully submit that Shemla also does not anticipate claim 75. Claims 76-83 depend on claim 75, and also are submitted to be allowable for at least the same reasons set forth above with respect to claim 75.

Claim 94

Claim 94 recites in part writing one of a plurality of sets into an allocation register, identifying a data element in the allocation register, and changing the value of the data element.

As discussed above, Shemla does not at least teach or suggest these features. For at least the reasons similar to those discussed with respect to claim 94, Applicants respectfully submit that Shemla also does not anticipate claim 94. Claims 95-101 depend on claim 94, and also are submitted to be allowable for at least the same reasons set forth above with respect to claim 94.

Conclusion

Applicants respectfully request that all pending claims be allowed.

By responding in the foregoing remarks only to particular positions taken by the Examiner, Applicants do not acquiesce with other positions that have not been explicitly addressed. In addition, Applicants' arguments for the patentability of a claim should not be understood as implying that no other reasons for the patentability of that claim exist.

For all of the reasons set forth above, it is urged that the application is in condition for allowance, an indication of which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' representative at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 06-1050 and please credit any excess fees to such deposit account.

Respectfully submitted,

Date: 6-6-07

42,516

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